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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BAYERL, RAYMOND J

ART UNIT PAPER NUMBER

2173

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/050,771	Applicant(s) ANDERSON ET AL.	
	Examiner Raymond J. Bayerl	Art Unit 2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 4, 6 - 8, 10 - 15, 17 - 22, 25 - 29, 32 - 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 4, 6 - 8, 10 - 15, 17 - 22, 25 - 29, 32 - 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Claim 32 is objected to for the following informality: In providing the amended copy of claim 32 in the 13 October 2005 response, applicant has “as reicted in claim 026”, where it appears to have been applicant’s intention to line-through the “0”.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1 – 4, 6 – 8, 10 – 15, 17 – 22, 25 – 29, 32 – 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clayton et al. (“Clayton”; US #6,725,022) in view of applicant’s own admission as to prior art in the present specification.

As per independent claim 1’s “in-vehicle audio browser”, Clayton, in ENABLING THE SELECTION OF CONTENT ON A WIRELESS COMMUNICATION DEVICE, provides for [a]n internet radio for portable applications and uses such as in an automobile (Abstract). The multimedia device 20 of Clayton specifically includes a display screen 160 that is accompanied by a number of button controls (fig 2; col 9, lines 1 – 51).

For “a first set of buttons configured to select a preset item”, Clayton has preset button 166 controls.

The “third button configured to cycle through and select a desired band” reads upon the channel selector buttons 162a, by which the user can see all the channels available within a subcategory (col 9, lines 30 – 61). A variety of groupings similar in function to the claimed “band” appear, within the hierarchy of Clayton’s fig 5. Topics that suggest “bands”, such as MUSIC and TALK can be selected via buttons 162a, within the main categories of AUDIO CHANNELS and DATA/INFORMATION

CHANNELS, as Clayton permits the user to broadly navigate all the channels of audio broadcasts and information services that are listed in a hierarchical tree (col 9, lines 13 - 28).

The “fourth button configured to activate a function that varies depending on the selected band” has a parallel in Clayton’s action buttons 172, whose purposes may change from program to program (col 10, lines 26 – 36).

Clayton permits the navigation of information channels by browsing through them (up, down, forward, back), and in Clayton, “a plurality of bands including primary audio control bands” and “conditional audio control bands” are accessed: The two types of channels preferably available are audio broadcasts (e.g., AM, FM, TV, digital, Internet audio broadcasts and recorded material) and personal information services (e.g., navigation, email, traffic alerts, etc.). (col 5, line 67 – col 6, line 13).

Despite these similarities to the claimed invention, Clayton does not **explicitly** teach the addition of a “second button configured to select between a first list of items and a second list of items”, where these are each a “plurality of bands” that are “primary audio” and “conditional audio”, respectively. The channel selector button 162 of Clayton might well navigate between such choices as “primary” and “conditional” (e.g., Clayton’s AUDIO and DATA/INFORMATION in fig 5), only this is the same “button” as that which operates within “the list of items” that is selected.

However, in the admitted prior art situation of multiple bands noted by applicant at pages 1 – 2 of the present specification, a selected band is the basis for further selections among the content such as AM, FM1, FM2, and CD that are typical in a car

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stereo. It was known at the time of applicant's invention that navigation to a desired content source begins with controls at a first level below the overall system root (band), and then continues with other user-actuated controls to reach subcomponents of the first level's choices (the tuned-to station or item).

Thus, it would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to provide a control for a broader selection "between" "a first plurality of bands" and "a second plurality of bands" as per the admitted prior art's top-level navigation input via a "button" interface, in arriving at the variety of services available as information channels in Clayton (and that would be accessed via a different "button" in the combination such as Clayton's), because Clayton incorporates such a variety that whole categories of information services should be more properly segregated in such a way than through membership in a selection tree such as is navigated by button 162. Motivation lies at least in Clayton, which teaches such a two-tiered hierarchy, where the prior art suggestion also involving a two-tiered hierarchy would avoid the potential ambiguity that arises from navigating via Clayton's identically-disclosed single button 162.

As per claim 2's "radio band", "CD player band", these were known in the "in-vehicle audio" systems of the prior art, as seen in applicant's own admission.

Claim 3's list of satisfactory services for "conditional audio control bands" reads upon Clayton, who teaches a "navigation band" (navigation services; col 11, lines 57 – 66), a "contact list band" (Clayton's incorporation of Personal directory data from phone books, address books and to-do lists; col 12, lines 42 – 52) and a "telephone task band"

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(Clayton's capacity to call a phone number from an advertisement; col 10, lines 26 – 36).

As per claim 4's "display configured to identify the selected band", please note that the display screen 160 in Clayton's fig 2 has a SELECTED CHANNEL DISPLAY in the main client region. This indicates which kind of service is being provided, and thus, in the obvious extension to "band"-organized services suggested by the admission as to prior art, which "band" is in use in the second level of the hierarchy.

As in claim 6, a "fifth set of buttons configured to move forward and backward through elements in the selected band" is suggested by the admitted prior art's adaptation of the Clayton multi-tiered hierarchy. In such a situation, the person having ordinary skill in the art would immediately recognize the value of having such a separate control within a group such as MUSIC or TALK.

Within Clayton's AUDIO CHANNELS, such "primary audio control bands" as are contained will "affect the audio output when selected" (claims 7, 14, 20).

As per claim 8, with a "fourth button" that "is configured to save currently playing audio output" (see also claim 32), it has been noted that the action buttons 172 of Clayton's fig 2 may change from program to program. One of these choices can be "INFO" to save extended information on something that is being broadcast (col 10, lines 26 – 36).

When taken in conjunction with Clayton's being a solution to the problem of recording of the radio in the vehicle at preset times for later playback (col 4, lines 15 – 29), it would have been further obvious to the person having ordinary skill in the art at

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the time of applicant's invention to use a Clayton action button to "save" as is recited, since this is a central goal of Clayton and Clayton already lets extended information be retained from real-time broadcasts.

The action button choices in Clayton clearly give a "fourth button" configuration "to select among a current task" for the program in play (claim 10).

As per claim 11 (and see also claims 15, 21), since the DATA/INFORMATION CHANNELS in Clayton provide capabilities such as phone books, address books and to-do lists, as noted above, "the conditional audio control bands do not affect the audio output unless a function requiring an audio output is activated" among such choices, with a "fourth" action button.

That "the stored information is synchronized with an external computing device" (claim 12) follows from the ability in Clayton to handle Personal directory data, as from notebook computers, PDAs or cellular phones (col 12, lines 42 – 52).

Features of the "in-vehicle audio browser" recited in independent claim 13 have been already discussed, relative to claim 1. The "third set of buttons configured to select a preset item, wherein the preset item is dependant on the selected band" have parallel in Clayton's action buttons 172, while the "first button configured to select between a set of primary audio control bands and a set of conditional audio control bands" is suggested by the prevalence of "band"-selection controls on prior art systems as per applicant's admission, when extended to the larger set of broadcast and personal services contemplated by Clayton, with a separate "second button configured to select a band" being used as the hierarchy is navigated in Clayton by channel selector buttons.

The “fourth button configured to activate a function that varies based on the band” (claims 17, 18) reads upon the action buttons 172 in Clayton, whose functions are also soft-key mapped to depend upon “the selected band”. There are plural action buttons 172, so that the claimed “third” and “fourth button” have counterparts among these in Clayton.

Independent claim 19’s “user interface” also resembles a Clayton services screen arrangement, when modified for top-level band-group selection as per the suggestion of the admitted prior art. The use of “a source button” for differentiation between “primary” and “conditional audio” reads upon the suggestion that existing “band” controls be applied to the world of extended broadcast and personal services in Clayton. When Clayton finally has such a “band” chosen via “a band button”, “a display device” (display screen 160) then provides information relevant to that band.

Certainly among the broadcast bands available in the admitted prior art set-up are “a radio band and a CD player band” (claims 22, 28), and within the personal services in Clayton, “navigation” and “a contact list” (claims 25, 29) are seen, as noted above with respect to claim 3.

The “computer-readable media” of independent claim 26 are of a type that would be employed, should the multimedia device 20 in Clayton be configured with “band”-list controls as per the admitted prior art. The “display” from among a “primary” and “conditional audio control band” is to be seen in Clayton, who provides both such services and an interactive screen in support of them, as noted above. The use of a “first car radio button” for “changing the currently selected car radio band” would follow

from the maintenance of a top-level “band” selector in the admitted prior art’s adaptation of Clayton’s expanded services. Then, “moving through a list of items” is made possible with Clayton’s channel selector 162, the “second car radio button”.

In such a setting, by “using a set of preset buttons” (the Preset buttons 166), the Clayton user may “select a particular item” (claim 27). Also, the telephone integration disclosed by Clayton makes it possible to “CALL” to call a phone number (col 10, lines 26 – 26), as in claim 33’s ability to “dial a phone number currently displayed on the car radio in response to activation of an ACT button [a Clayton action button] on the car radio”.

4. Applicant's arguments filed 13 October 2005 have been fully considered but they are not persuasive.

Applicant argues against the applicability of Clayton by noting at page 12 that “Clayton teaches a screen displaying a vertical list of all possible audio and information channels, including music, talk, TV audio, recorded audio, personalized directory services and information services”, with “the use of four channel selector buttons” “to go up and down the vertical list of all possible channels”. This, as applicant asserts at page 13, “represents the very prior art that Applicant sought to overcome, since the use of the audio device in Clayton may take so much effort as to distract the driver from the primary task of driving the vehicle”. However, it remains that Clayton teaches a hierarchy that may be navigated from a top level of AUDIO CHANNELS and DATA/INFORMATION CHANNELS, and into subcategories such as MUSIC and TALK, as noted above, via the up/down and forward/back motion of the channel selector 162,

so that a “button” permits a cycling-through at the particular level of a “band”. Given that the admitted prior art in an “in-vehicle audio browser” teaches that the top level of hierarchical access (in the case of multiple bands) is accompanied by a secondary mode of access at the second level of the hierarchy (so as to pick within a band), sufficient suggestion would have been made to the person having ordinary skill that Clayton’s two top levels of hierarchy should also be given separate controls, these being for choosing between “a first list of items and a second list of items” for “primary” and “conditional audio control bands”, and then “to cycle through and select a desired band from the list of items”. It is not true that the “long vertical list of all possible audio and information channels” in Clayton “teaches away from ‘a second button configured to select between a first list of items and a second list of items’”, since these two groups are explicitly shown in Clayton’s fig 5 hierarchy, a hierarchy that applicant notes as being navigable by descending into sub-choices for a given choice.

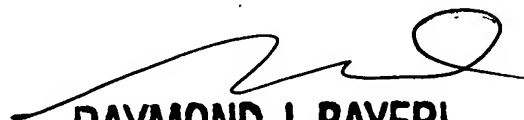
Applicant argues against the applicability of the admitted prior art at page 13 by pointing out that “all of the available bands are presented to a user in a linear listing, representing the same organization and presentation as is taught in Clayton.” However, what such an argument fails to appreciate is the inherent hierarchy presented in the admitted prior art’s control arrangement. At the top level are the multiple bands, and below that, accessible according to a secondary mode of user input, are the individual selectable items. Such a descent from the root of a car radio hierarchy, when mapped to the broader tree of items in Clayton, will place the groups of AUDIO and DATA/INFORMATION at the top, using one set of “button” controls, and “band”

selection at the second, lower level. It would not have been lost, on the person having ordinary skill, to retain familiar aspects of the admitted prior art's interface of first and second inputs for navigation, when considering an enhanced implementation of the Clayton tree.

The remainder of applicant's arguments through page 24 reiterate this set of contentions regarding claim 1, as being additionally applicable to independent claims 13, 19, 26. The argument is that Clayton teaches such divergence from standard vehicular browser format as to cause the driver to be distracted, and that known car radio interfaces merely presented all of the bands in a single list, while the claimed invention will divide the choices in half, by means of the top-level selection button between "primary" and "conditional". Applicant's general tactic appears to be attacking the references one at a time, without appreciating that the hierarchy in Clayton is that of applicant's invention, to the level of "bands" and items within them. But the Examiner is charged with considering the overall suggestion to a person having ordinary skill in the art, and such a person would know of the user acceptance of two-level car radio interfaces for the hierarchies that have been historically presented (band and channel). When a proven interface such as this is confronted with Clayton's added level of hierarchy above the multiple bands, the suggestion is therefore to use the claimed "button" to select at a lower level, as in Clayton's activation of channel selector 162 for this purpose, but then to use a secondary set of user controls as per the admitted prior art for a level above that, so that ambiguity is avoided and the driver's attention is not needlessly diverted.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond J. Bayerl whose telephone number is (571) 272-4045. The examiner can normally be reached on M - Th from 9:00 AM to 4:00 PM ET.
6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca, can be reached on (571) 272-4048. All patent application related correspondence transmitted by FAX **must be directed** to the central FAX number (571) 273-8300.
7. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.



RAYMOND J. BAYERL
PRIMARY EXAMINER
ART UNIT 2173
14 November 2005